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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,485	06/29/2001	Natan Vishlitzky	EMC-01-081	9271
7590	03/25/2004		EXAMINER	
Penelope S. Wilson Office of General Counsel EMC Corporation 35 Parkwood Drive Hopkinton, MA 01748-9103			PORTKA, GARY J	
			ART UNIT	PAPER NUMBER
			2188	
			DATE MAILED: 03/25/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/896,485	VISHLITZKY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gary J Portka	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 June 2001.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-15 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 29 June 2001 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

1. Claims 1-15 are presented for examination.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2, 7, and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Each of these claims recite that digits comprising the segment identifier are shifted to higher order positions and the offset is added thereto. However, the independent claims recited that a request contains an address that includes the segment identifier and offset, which are considered "fields" in the following. It is not clear to the examiner from the specification, and not shown in the drawings, how in a single address one field can be shifted without destroying some of the data shifted over (unless the shifted-to area is unused) or losing some of the original field (support in specification?). Since it is not clear how such an operation is done, the claims are not enabled.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-6, 8-11, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by DeSota et al., U.S. Patent 6,295,584 B1.

6. As to claims 1, 6, and 11, DeSota discloses a memory manager, method, and program product as recited including receiver and operation control modules that receive an access request and perform an access in accordance with an address translation (which is generally inherent in the system shown in Fig. 2, and as further described at sections cited hereinbelow), and address translation module that provides the address in the request as an absolute address when the request is for one section of memory (i.e., a processor accessing its own local memory, by using the “actual address” or by “directly” addressing, see col. 7 lines 38-41 and 45-52, and col. 11 lines 62-65), and generates an absolute address from the address provided in the request including segment identifier and offset when the request is for another section (i.e., a remote access, in which a request is translated to the space for that node by using “base” and “index” to find the actual address, see col. 8 lines 8-11 and 22-30, col. 9 lines 20-29 and 37-45, and col. 12 lines 6-12). It is noted that whether or not a base address is involved in accessing a local memory, since as shown in Fig. 4 for example, private low memory starts at 0, the base would be 0 and the address an absolute address as recited.

7. As to claims 3, 8, and 13, the segment (base) identifies a segment in the section as recited, and it is inherent or at least obvious that otherwise the circuit would be non-operational if not done, that verification is performed since otherwise the address generated would be in error.

8. As to claims 4, 9, and 14, the sections may be considered cache as recited, since any data moved to a local memory may be considered cached at that node in a NUMA system (see background).

9. As to claims 5, 10, and 15, a third section is disclosed since there are three nodes shown in Fig. 4.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No:

6,604,184      Region-based address mapping using page tables.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J Portka whose telephone number is (703) 305-4033. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (703) 306-2903. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary J Portka  
Primary Examiner  
Art Unit 2188

March 19, 2004

